

UTAH CTE SKILL CERTIFICATE PROGRAM

MECHANICAL DRAFTING

STUDENT PERFORMANCE EVALUATION

TEST #546

Student Name: _____

The performance evaluation is a required component of the Skill Certification process. Each student **must be evaluated** on the required performance standards. Performance standards may be completed and **evaluated anytime during the course**.

- Students should be aware of their progress throughout the course, so that they can concentrate on the objectives that need improvement.
- Students should be encouraged to repeat the objectives until they have performed at a minimum of a number 1 or 2 on the rating scale (moderately to highly competent level).
 - 1= highly competent Successfully demonstrated without supervision
 - 2= moderately competent Successfully demonstrated with limited supervision
 - 3= limited competence Demonstrated with close supervision
 - 4= not competent Demonstration requires direct instruction and supervision
- When a standard has been achieved at a minimum of 80% (moderately to highly competent level). "Y" (Y=YES) is recorded on the last line of that standard, on the performance evaluation sheet. If a student does not achieve a 1 or a 2 (moderately to highly competent level), then "N" (N=NO) is recorded on the last line of that standard.
- All performance standards **MUST** be completed and evaluated prior to the written test.
- The **teacher** will bubble in "A" on the answer sheet for item #81 for students who have achieved "Y" on **ALL** performance standards.
- The **teacher** will bubble in "B" on the answer sheet for item #81 for students who have **ONE or more "N's"** on the performance standards.
- The signed performance evaluation sheet(s) **MUST** be kept in the teachers' file for two years.
 - A copy is also kept on file with the school's ATE Skill Certification testing coordinator for two years.

Students who achieve a 1 or a 2 (moderately to highly competent) on ALL performance standards and 80% on the written test will be issued an ATE Skill Certificate.

151304-01 The student will be able to develop a technical drawing using standard sectional views such as full, half, offset, broken-out, removed, and revolved.				
1	2	3	4	
	Show that section drawings are completed according to ANSI standards.			
	Show that section lines are drawn at a Forty-five (45) degree angle unless a more appropriate angle is justified.			
	Construct section lines dark and very thin.			
	Develop cutting plane lines according to the alphabet of lines.			
	Develop break lines according to the alphabet of lines.			
	Show that section lines are spaced uniformly.			
	Show visible edges and contours behind the cutting plane correctly.			
	Demonstrate that hidden lines are omitted.			

151304-02 The student will be able to demonstrate the use of auxiliary views.				
1	2	3	4	
	Create a primary auxiliary view from any orthographic projection.			
	Draw folding lines or reference-plane lines between any two adjacent views.			
	Construct depth, height, or width auxiliary views.			
	Plot circles and arcs are drawn to conform with the intersection of projection lines and transferred lines.			
	Construct partial auxiliary views.			
	Create auxiliary sectional views.			
	Find the true size and length of an oblique line by constructing an auxiliary view.			
	Create secondary auxiliary views.			

151304-03 The student will be able to demonstrate the use of intersections and developments.				
1	2	3	4	
	Parallel lines.			
	Radial.			
	Triangulation.			

151304-04 The student will be able to understand and demonstrate the use of fasteners.				
1	2	3	4	
	Develop different thread forms.			
	Calculate thread pitch.			
	Write different thread notes.			
	Draw the simplified, schematic, internal and external type threads.			
	Work with American National, Unified and metric threads.			
	Draw blind, through, and clearance holes, studs, cap machine screws, pins and specialty fasteners.			
	Correctly draw, locate, and label fasteners on production, assembly drawings, and parts lists.			

151304-05 The student will be able to understand and demonstrate the use of pictorial drawings.				1	2	3	4
	Construct angles on an isometric.						
	Construct isometric circles and arcs.						
	Construct and isometric in the center of a drawing space.						
	Construct an oblique drawing in the center of a drawing space.						
	Construct angle on an oblique drawing.						
	Construct oblique circles.						
	Construct a cavalier oblique drawing of a given object.						
	Construct a cabinet oblique drawing of a given object.						
	Construct a drawing to the appropriate size and scale.						
	Construct a one-point perspective.						
	Construct a two-point perspective.						

151304-06 The student will be able to understand and demonstrate the basics of Geometric Dimensioning and Tolerancing (GD&T).				1	2	3	4
	Understand and use basic GD&T symbols.						
	Create limit dimensions.						
	Dimension two mating parts using limit dimension, unilateral tolerances, and bilateral tolerances.						
	Draw geometric tolerancing symbols.						
	Specify position and geometric tolerances.						
	Draw and place feature control symbols and datum references on a drawing.						
	Specify positional tolerances in reference to maximum material condition (MMC), regardless of feature size (RFS), and least material condition (LMC).						
	Specify and apply the tolerance symbols, tolerances and Datums on various drawings.						

151304-07 The student will be able to understand and identify basic welding symbols.				1	2	3	4
	Understand, identify and draw basic weld symbols.						

151304-08 The student will be able to understand and demonstrate applied mathematics.				1	2	3	4
	Perform basic arithmetic functions.						
	Convert fractions/decimals.						
	Convert metric/inch measurements.						

	Perform basic trigonometric functions
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151304-09 The student will be able to understand and assemble working drawings.				1	2	3	4
	Develop a set of working drawings of six or more parts, of industry assembled parts.						

151304-10 The student will be able to understand and identify manufacturing processes.				1	2	3	4
	Develop a set of working drawings of six or more parts, of industry assembled parts.						

The instructor must retain a copy of this Student Performance Evaluation for two years after the student has left the program.

Instructor Signature: _____

Date: _____

Student Signature: _____

Date : _____

School _____